

26. (New) The control object of Claim 25, further comprising a translation complete event which indicates that the translation method has completed translating the data in the text property.

A4  
27. (New) The control object of Claim 25, further comprising a translated text property for storing results of the translation method.

28. (New) The control object of Claim 27, further comprising a use translated text property which indicates whether accesses of the control object access the translated text property or the text property.

---

#### REMARKS

Applicant provides the present Amendment to respond to the issues raised in the Official Action mailed February 27, 2001. In response to that Official Action, Applicant has amended Claims 1, 9 and 17 to clarify the nature of the present invention. Applicant submits that these amendments do not narrow the scope of the claims and are not for purposes of patentability. Applicant has also added new Claims 25 through 28 directed to a control object according to embodiments of the present invention. Support for the new claims is found, for example, on page 9 at lines 8 through 21. Applicant requests entry and examination of these new claims.

To comply with the new amendment requirements, Applicant submits herewith at Tab B, the attachment entitled "Amendments with Changes Shown" which indicates how the claims and the other amendments were made.

#### The Objection to the Abstract

The Official Action has objected to the Abstract as not in proper form. Official Action, p. 2. Applicant has rewritten the Abstract as attached hereto at Tab A. Applicant submits that the objection to the abstract has been overcome.

**The Objection to the Title**

The Official Action has objected to the Title as not descriptive. Applicant has amended the title to be more descriptive. Accordingly, Applicant submits that the objection to the title has been overcome.

**The Rejections Under 35 U.S.C. § 112**

Claims 1-24 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one of skill in the art to make and/or use the invention. Official Action, p. 2. In particular, the Official Action asserts that the recitation "encapsulating said steps of initializing and identifying in order to make a reusable object" is not described in the specification. Applicant respectfully disagrees for the reasons discussed below.

The concept of encapsulation in object oriented programming is well established. Examples of the use of the term "encapsulation" in object oriented programming are illustrated in the documents provided at Tab C. For example, as recited in the Computer Dictionary, Third Edition from Microsoft Press (1997), at page 175 "encapsulate" is defined as "[i]n object-oriented programming, the implementation details of a class are encapsulated in a separate file whose contents do not need to be known by a programmer using that class." Similarly, in the Object FAQ at [www.cyberdyne-object-sys.com](http://www.cyberdyne-object-sys.com) (1997), Section 1.2 at page 7 of 22 describes encapsulation as "[t]he process of compartmentalizing the elements of an abstraction that constitute its structure and behavior." Furthermore, as seen in, for example, United States Patent Nos. 5,723,263 and 5,768,505 encapsulation is well known in object oriented programming. *See e.g.*, 5,723,263, col. 4, line 66 to col. 5, line 7 and Figure 1 and 5,768,505, col. 8, lines 6 to 17.

Given that encapsulation is a well known property of object-oriented programming, Applicant submits that the encapsulation of the translation language and when translation should be invoked is described in the present specification with sufficient detail to allow one of skill in the art to practice the claimed invention. For example, at pages 7 through 9 of the present specification, the properties, methods and

events associated with particular text objects according to certain embodiments of the present invention are described. As is seen on page 9, properties

"translationLanguage" and "useTranslatedText" identify the language to translate the text to and whether to use the translated text. As such, an object which performs the claimed encapsulation has been described. Accordingly, Applicant submits that the rejection under 35 U.S.C. § 112 should be withdrawn.

Claims 1-24 also stand rejected under 35 U.S.C. § 112, second paragraph and the recitations "for data" and "relevant controls" are considered vague and indefinite. Applicant has removed these recitations from the claims such that the claims recite "identifying when translation should be invoked for text in the control." Such language does not change the scope of the claims and is definite. Accordingly, Applicant submits that the rejections under the second paragraph of 35 U.S.C. § 112 have been overcome and should be withdrawn.

#### **The Anticipation Rejection**

Claims 1-24 also stand rejected as anticipated under 35 U.S.C. § 102 based on alleged admitted prior art of Figure 3 of the present application (hereinafter the "APA"). Applicant submits that Figure 3 does not disclose the invention recited in Claims 1-24 because Figure 3 does not disclose or suggest the encapsulation of the translation language and when translation should be invoked. In contrast, Figure 3 illustrates a programmer making a determination for each control of whether machine translation is required and manipulating the control to obtain the text to be translated from the control and translating the text using a translation engine. See Figure 3 and page 6 of the present specification. Such is not encapsulation of initialization of languages and when translation should be performed with the control to provide a reusable control as is recited in Claims 1, 9 and 17 and the claims which depend from these claims. Accordingly, Applicant respectfully submits that the alleged APA does not disclose or suggest the encapsulation of Claims 1-24 and, therefore, does not anticipate any of these claims.

**The New Claims Are Patentable**

Claims 25 to 28 have been added to the present application and recite a control object for controlling text. For example, Claim 25 recites:

25. (New) A control object for controlling text, the control object comprising:  
a text property for storing data corresponding to the text to be controlled by the control object;  
a **translation language property** which indicates a language to which the text to be controlled is to be translated; and  
a **translation method** which performs translation of data in the text property.

New Claim 25 (emphasis added). Applicant submits that such a control object is expressly identified as **not** conventional in the present specification. *See* Specification, p. 9. As such, Applicant submits that Claims 25 to 28 are patentable over the alleged APA and, therefore, requests allowance of these claims.

**CONCLUSION**

Having addressed each of the issues raised in the Official Action, Applicants submit that the present application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,

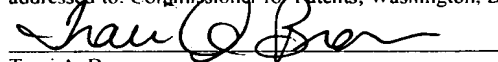


Timothy J. O'Sullivan  
Registration No. 35,632

USPTO Customer No. 20792  
Myers Bigel Sibley & Sajovec  
Post Office Box 37428  
Raleigh, North Carolina 27627  
Telephone: 919/854-1400  
Facsimile: 919/854-1401

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on April 17, 2001.



Traci A. Brown  
Date of Signature: April 17, 2001

### **Amendments With Changes Shown**

#### **In the Title:**

Please replace "MULTI-LINGUAL USER INTERFACE CONTROL" with the following:

--REUSABLE CONTROLS FOR AUTOMATICALLY TRANSLATING TEXT BETWEEN LANGUAGES--.

#### **In the Abstract:**

Please amend the abstract as follows:

##### **[Abstract**

##### **MULTI-LINGUAL USER INTERFACE CONTROL**

When a clerk enters order data into the appropriate fields of an order form, the data is stored in a first language in a local database. Then, for example, an e-mail is automatically sent to a different location (and second language) country which will fulfill the order. Upon receiving the e-mail, the fulfillment location country queries the remote (to them) database in the second language to view the order. When the first language order data is placed in the form and prior to presenting it to the user for viewing, Machine Translation would be invoked to translate the data to the second language for the user. The order is then processed.]

##### **REUSABLE CONTROLS FOR AUTOMATICALLY TRANSLATING TEXT BETWEEN LANGUAGES**

##### **Abstract of the Disclosure**

Methods, systems and computer program products provide reusable controls for automatically translating text with a reusable control by identify a plurality of variables comprising at least a source and a target language, identifying when translation should be invoked for text in the control and encapsulating said steps of initializing and identifying in order to make a reusable data object. Control objects for controlling text are also provide which include a text property for storing data corresponding to the text to be

controlled by the control object, a translation language property which indicates a language to which the text to be controlled is to be translated and a translation method which performs translation of data in the text property.

**In the Claims:**

Please replace Claim 1 with the following:

1. (Amended) A method of automatically translating text with a reusable control, comprising the steps of:
  - initializing parameters to identify a plurality of variables comprising at least a source and a target language;
  - identifying when translation should be invoked for [data]text in [relevant controls]the control; and
  - encapsulating said steps of initializing and identifying in order to make a reusable data object.

Please replace Claim 9 with the following:

9. (Amended) A reusable automatic text translation control, comprising:
  - means for initializing parameters to identify a plurality of variables comprising at least a source and a target language;
  - means for identifying when translation should be invoked for [data]text in [relevant controls]the control; and
  - means for encapsulating said steps of initializing and identifying in order to make a reusable data object.

Please replace Claim 17 with the following:

17. (Amended) A computer program product recorded on computer readable medium for automatically translation text with a reusable control, comprising:
  - computer readable means for initializing parameters to identify a plurality of variables comprising at least a source and a target language;

computer readable means for identifying when translation should be invoked for [data]text in [relevant controls]the control; and

computer readable means for encapsulating said steps of initializing and identifying in order to make a reusable data object.

Please add the following claims:

25. (New) A control object for controlling text, the control object comprising:

a text property for storing data corresponding to the text to be controlled by the control object;

a translation language property which indicates a language to which the text to be controlled is to be translated; and

a translation method which performs translation of data in the text property.

26. (New) The control object of Claim 25, further comprising a translation complete event which indicates that the translation method has completed translating the data in the text property.

27. (New) The control object of Claim 25, further comprising a translated text property for storing results of the translation method.

28. (New) The control object of Claim 27, further comprising a use translated text property which indicates whether accesses of the control object access the translated text property or the text property.

09/40714/1

# REUSABLE CONTROLS FOR AUTOMATICALLY TRANSLATING TEXT BETWEEN LANGUAGES

## Abstract of the Disclosure

Methods, systems and computer program products provide reusable controls for automatically translating text with a reusable control by identify a plurality of variables comprising at least a source and a target language, identifying when translation should be invoked for text in the control and encapsulating said steps of initializing and identifying in order to make a reusable data object. Control objects for controlling text are also provide which include a text property for storing data corresponding to the text to be controlled by the control object, a translation language property which indicates a language to which the text to be controlled is to be translated and a translation method which performs translation of data in the text property.